### REMARKS

In view of an interview with Examiner Myers on September 6, 2007, Applicants submit a response and amendment to substitute for and replace the response and amendment filed on August 27, 2007 which had not been entered by the Examiner. Applicants believe that the amendments made herein put the claims in condition for allowance and respectfully request entry of this amendment.

Claims 61, 68, and 81, 82, 87-90, and 100-101 are pending. Claims 61 and 68 are allowed per the Office Action mailed August 28, 2006. Claims 61, 68, 81, 87, 89, 100, and 101 are amended. Claims 83 and 84 are cancelled herein without prejudice. Cancellation of the claims is without waiver of Applicants' right to pursue the cancelled subject matter of these claims in one or more continuation or divisional applications. No new matter is added as a result of the amendments.

#### **Interview Summary**

Applicants thank Examiner Carla Myers for the courtesy of a telephonic interview on September 6, 2007. Applicants were represented in the interview by Margaret B. Brivanlou. During the interview, the advisory action mailed on August 31, 2007, and the amendment filed by Applicants on August 27, 2007 were discussed. In view of the Examiner's comments in the advisory action, Applicants inquired if certain revisions to the amendment filed August 27, 2007 that had not been entered could be made in order to put the claims in condition for allowance. Examiner Myers indicated that she would consider such a revised amendment favorably. In particular, the Examiner indicated that Applicants should clarify claim 100 to make clear that the kit of claim 100 includes both an oligonucleotide for the detection of the FD1 mutation, as well

as an oligonucleotide for the detection of the FD2 mutation. Such an amendment is presented herein. Applicants also agreed not to include claim 102 in this substitute amendment as the Examiner found that the claim raised new issues. Applicants, therefore, have removed claim 102 without waiver of Applicants' right to pursue the subject matter of this claim in one or more continuation or divisional applications. The Examiner also indicated that the amendments made to the other claims as presented in the response filed August 27, 2007 had resolved all previous rejections of those claims. It was agreed that such a revised amendment should put the claims in condition for allowance.

#### Claim Objections

Claim 101 is objected to because the Examiner states that the claim refers back to the oligonucleotide probe of claim 100, whereas claim 100 is drawn to a kit comprising an oligonucleotide probe. As per the Examiner's suggestion, Applicants have amended claim 101 to refer to the "kit of claim 100." Applicants therefore respectfully request removal of the objection.

### Claim Rejections

### 35 U.S.C. §112, second paragraph

Claims 81-84, 87-90, 100, and 101 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The Examiner states that the claims are indefinite over the recitation of "the FD" mutation because "the phrase lacks proper antecedent basis since the claims do not previously refer to a FD mutation." As the Examiner has suggested, Applicants have amended claims 81-84 and 87-90 to recite "a FD1 mutation at position 34,201 of SEQ ID NO:1" and "a

FD2 mutation at position 33,714 of SEQ ID NO:1," and have amended claim 100 to provide antecedent basis in the preamble. Applicants submit that these amendments do not change the scope of the claims.

The Examiner also states that, although the instant specification defines both "FD1 mutation" and "FD2 mutation" it is recommended to amend allowed claims 61 and 68 to include the definitions of these terms. Applicants therefore have amended claim 61 to recite "a FD1 mutation at position 34,201 of SEQ ID NO:1" and "a FD2 mutation at position 33,714 of SEQ ID NO:1."

The Examiner further states that claims 87-90, 100, and 101 are indefinite over the recitation of "nucleotide corresponding to" is "not an art recognized term to describe the relationship between a nucleotide and a nucleic acid sequence." In order to clarify the meaning of "the nucleotide corresponding to" the specific positions recited, Applicants have amended the claims to recite "the nucleotide which is at the same position as position 34,201 of SEQ ID NO:1" and "the nucleotide which is at the same position as position 33,714 of SEQ ID NO:1." Applicants submit that these amendments do not change the scope of the claims.

# 35 U.S.C. §§102(b) and 103(a)

Claims 83 and 100 are rejected under 35 U.S.C. §102(b) as being anticipated by Cohen (U.S. Patent No. 5,891,719) and claims 84 and 101 are rejected under 35 U.S.C. §103(a) as being unpatentable over Cohen. The Examiner states that Cohen discloses oligonucleotides of the IKAP gene which include nucleotide 33,714 of SEQ ID NO: 1 of the instant application. In order to advance prosecution, Applicants have cancelled claims 83 and 84. Regarding claims 100 and 101, claim 100 has been amended to recite "A kit for the detection of the FD1 and FD2

mutations," and requires that the kit contains oligonucleotide probes for both the FD1 mutation and the FD2 mutation are within the kit. As the Examiner has recognized that the oligonucleotides recited in claims 81 and 87 for detecting the FD1 mutation are patentable over Cohen, Applicants submit that Cohen does not disclose the combination of oligonucleotides for detecting FD1 and FD2 mutations, and therefore, does not anticipate or render obvious the claimed kits. Applicants therefore respectfully request that the rejections under 35 U.S.C. §§102(b) and 103(a) be withdrawn.

#### **CONCLUSION**

Based on the foregoing remarks, Applicants respectfully request reconsideration and withdrawal of the rejection of claims and allowance of this application.

## **AUTHORIZATION**

The Commissioner is hereby authorized to charge any additional fees which may be required for consideration of this Amendment to Deposit Account No. <u>50-3732</u>, Order No. <u>13572.105039</u>.

In the event that an extension of time is required, or which may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to Deposit Account No. <u>50-3732</u>, Order No. <u>13572.105039</u>.

Respectfully submitted, KING & SPALDING LLP

Dated: September 7, 2007

By:

Correspondence Address: KING & SPALDING LLP 1185 Avenue of the Americas New York, NY 10036

Kenneth H. Sonnenfeld/ Margaret B. Brivanlou

Reg. No. 33,285/ Reg. No. 40,922 (212) 556-2100 Telephone (212) 556-2222 Facsimile